WHAT IS CLAIMED IS:

1. A system for capturing images and geo-location data corresponding thereto, comprising:

an image-capturing device, said image-capturing device capturing oblique images at image-capturing events, said image capturing device issuing image-data signals corresponding to captured images;

at least one geo-locating device, each said at least one geo-locating device issuing a corresponding at least one geo-locating signal, each said at least one geo-locating signal being indicative at least in part of a geo-location of said image-capturing device during each image capturing event; and

a computer system receiving and storing said image-data signals and said at least one geo-locating signal; and

image and data acquiring software reading said image-data signals and said at least one geo-locating signal, said software associating each said image-data signal with a corresponding said at least one geo-locating signal for each image-capturing event.

2. The system of claim 1, wherein said at least one geo-locating device and said at least one geo-locating signal respectively comprise at least one of:

a clock issuing to said image-capturing computer system time data signals

indicative of a time of each said image-capturing event;

a global-positioning system (GPS) receiver receiving GPS signals and issuing to said image-capturing computer system location data signals indicative of a longitude and latitude of said image-capturing device at each said image-capturing event;

an inertial navigation unit (INU) issuing to said image-capturing computer system velocity data signals indicative of a velocity of said image-capturing device at each said image-capturing event;

a gyroscope issuing to said image-capturing computer system a pitch signal, a roll signal, and a yaw signal respectively indicative of a pitch, roll and yaw of said image capturing device at each said image-capturing event;

a compass issuing to said image-capturing computer system heading data signals indicative of a heading of said image-capturing device at each said image-capturing event; and

an altimeter issuing to said image-capturing computer system altitude data signals indicative of an altitude of said image-capturing device at each said image-capturing event.

3. The system of claim 1, wherein said at least one geo-locating device and said at least one geo-locating signal respectively comprise:

a clock issuing to said image-capturing computer system time data signals indicative of a time of each said image-capturing event;

a global-positioning system (GPS) receiver receiving GPS signals and issuing to said image-capturing computer system location data signals indicative of a longitude and latitude of said image-capturing device at each said image-capturing event;

an inertial navigation unit (INU) issuing to said image-capturing computer system velocity data signals indicative of a velocity of said image-capturing device at each said image-capturing event;

a gyroscope issuing to said image-capturing computer system a pitch signal, a roll signal, and a yaw signal respectively indicative of a pitch, roll and yaw of said image capturing device at each said image-capturing event;

a compass issuing to said image-capturing computer system heading data signals indicative of a heading of said image-capturing device at each said image-capturing event; and

an altimeter issuing to said image-capturing computer system altitude data signals indicative of an altitude of said image-capturing device at each said image-capturing event.

4. The system of claim 1, further comprising correction data indicative of characteristics of said image-capturing device including focal length, sensor size, radial distortion, principal point offset and alignment, said image and data acquiring software utilizing said correction data to correct captured images.

5. The system of claim 1, further comprising an output data file created by said image and data acquiring software, said output data file including a plurality of image files and positional data corresponding to each of said plurality of image files.

6. The system of claim 1, further comprising a platform carrying said image-capturing device a predetermined distance above a surface of interest.

7. A computerized system for displaying, geolocating, and making measurements based upon captured oblique images, comprising:

a computer system having a memory;

an image and data file accessible by said system and including a plurality of image files corresponding to a plurality of captured oblique images, said image and data file further including positional data corresponding to said plurality of image files;

image display and analysis software executed by said system for reading said image and data file and displaying at least a portion of the captured oblique images as a displayed image, said software retrieving said positional data of one or more selected points within said displayed image, said software calculating a separation distance between any two or more selected points within said displayed image.

8. The system of claim 7, further comprising a ground plane data file representing a tessellated ground plane, said ground plane data file accessible by said

computer system, said ground plane data file representing a tessellated ground plane that closely approximates at least a portion of the terrain depicted within said captured oblique images.

9. The system of claim 8, wherein said tessellated ground plane further comprises a plurality of interconnected facets, each of said plurality of facets having a respective pitch and slope.

10. The system of claim 9, wherein said ground plane data file comprises a plurality of vertices, each of said plurality of vertices having respective elevations and defining corners of said plurality of interconnected facets, two of said plurality of vertices shared by each of said interconnected facets.

11. The system of claim 10, wherein said image display and analysis software identifies which of said plurality of facets corresponds to a selected point on said displayed image, and calculates an elevation of said selected point dependent at least in part upon the elevation of the vertices of the facet corresponding to the selected point, said image display and analysis software using said calculated elevation for calculating said separation distance between said selected point and one or more further selected points.

12. The system of claim 11, wherein said image display and analysis software calculates a height of an object within said displayed image by calculating the separation distance between two or more selected points.

13. The system of claim 8, wherein said tessellated ground plane is one of superimposed upon and fit to said displayed image.

14. The system of claim 7, wherein said image display and analysis software includes user-selectable measuring modes accessible through at least one of pull-down menus, toolbars and keyboard commands.

15. The system of claim 7, wherein each of said images were captured by an image-capturing device and at respective image capturing events, said positional data of said image and data file including:

time data representing the time of each image-capturing event;

location data representing the location of the image-capturing device at each image-capturing event;

orientation data representing the orientation of the image-capturing device at each image-capturing event;

correction data representing correction factors for the image-capturing device; and

elevation data representing an average elevation of the surface captured by the image-capturing device.

16. The system of claim 15, wherein said location data includes latitude, longitude, and altitude of the image-capturing apparatus at each image-capturing event.

17. The system of claim 15, wherein said orientation data includes roll, pitch, yaw and heading of said image-capturing device at each image-capturing event.

18. The data set of claim 15, wherein said image-capturing device is a camera and said correction data includes at least one of focal length, sensor size, aspect ratio, principle point offset, distortion, and pixel pitch.

19. A computerized method for taking measurements within a displayed oblique image, comprising:

selecting with an input device a starting point and an end point on the displayed image;

retrieving from a data file positional data corresponding to said starting point and said end point;

referencing a ground plane data file corresponding to a tessellated ground plane having a plurality of facets, each of said facets having a respective pitch and slope, said

tessellated ground plane closely matching a terrain of said displayed oblique image;

connecting said starting and end points with line segments, said line segments conforming to said pitch and slope of said facets to thereby follow said terrain; and

calculating the linear distance along said line segments between said starting and end points thereby taking into account said pitch and slope of said facets.

20. The method of claim 19, wherein said tessellated ground plane is superimposed upon said displayed oblique image.

21. The method of claim 19, comprising the further steps of:

selecting with an input device one or more intermediate points on the displayed image;

retrieving from said data file positional data corresponding to said one or more intermediate points; and

connecting adjacent intermediate points to each other, and connecting said starting and end points to adjacent intermediate points, with line segments, said line segments conforming to said pitch and slope of said facets to thereby follow said terrain; and

calculating the distance along said line segments between said starting and end points.

22. The method of claim 19, wherein said plurality of facets each correspond to equal areas of said displayed oblique image.

23. The method of claim 19, wherein said plurality of facets each includes an equal number of pixels of said displayed oblique image.

24. A computerized method for taking measurements from an oblique image displayed on a computer system, at least one input device connected to said computer system, an image data file accessible by said computer system, said image data file including captured images and positional data corresponding thereto, said computerized method comprising:

placing the computer system into a desired one of a plurality of measurement modes, the desired measurement mode configured for calculating a desired measurement;

selecting a starting point on the displayed image;

retrieving the positional data corresponding to said starting point;

selecting an end point on the displayed image;

retrieving the positional data corresponding to said end point; and

calculating the desired measurement dependent at least in part upon said positional data of said starting and end points.

25. The method of claim 24, comprising the further steps of:

selecting one or more intermediate points on said displayed image; and

retrieving the positional data corresponding to said intermediate points.

26. The method of claim 24, wherein said plurality of measurement modes comprise a distance measuring mode calculating a distance between two or more selected points, a height measuring mode calculating a height difference between two or more selected points, a relative elevation measurement mode calculating the difference in elevation of two or more selected points, and an area measurement mode calculating the area encompassed by at least three points.

27. A method of capturing oblique images of an area of interest with an image-capturing device carried by a platform, each oblique image captured at a respective image-capturing event, said method comprising:

subdividing the area of interest into a plurality of sectors;

guiding the platform along a first path to thereby target one or more target sectors with the image-capturing device;

capturing with the image-capturing device one or more oblique images to thereby cover an entirety of each said target sector in oblique images captured from a first perspective;

guiding the platform along a second path to thereby target said target sectors;

capturing with the image-capturing device one or more oblique images to thereby cover an entirety of each said target sector in oblique images captured from a second perspective;

repeating said guiding and capturing steps along paths substantially parallel to and spaced apart from said first and second paths and capturing one or more oblique images to thereby cover an entirety of each of said plurality of sectors in oblique images captured from each of said first and second perspectives; and

recording positional data indicative of a geo-location of said image-capturing device at each image-capturing event.

28. The method of claim 27, wherein said second path is substantially parallel relative to and 180° (one-hundred and eighty degrees) from said first path;

29. The method of claim 28, wherein said second path is also spaced apart from said first path.

30. The method of claim 27, comprising the further steps of:

guiding the platform along a third path to thereby target one or more target sectors with the image-capturing device, said third path being substantially perpendicular to said first and second paths;

capturing with the image-capturing device one or more oblique images to thereby

capture an entirety of each said target sector in oblique images captured from a third perspective; and

repeating said guiding and capturing steps along paths substantially parallel to and spaced apart from said third path and capturing one or more oblique images to thereby cover an entirety of each of said plurality of sectors in oblique images captured from said third perspective.

31. The method of claim 30, comprising the further steps of:

guiding the platform along a fourth path to thereby target one or more target sectors with the image-capturing device, said fourth path being substantially parallel with said third path and 180° (one-hundred and eighty degrees) from said third path;

capturing with the image-capturing device one or more oblique images to thereby capture an entirety of each said target sector in oblique images captured from a fourth perspective; and

repeating said guiding and capturing steps along paths substantially parallel to and spaced apart from said fourth path and capturing one or more oblique images to thereby cover an entirety of each of said plurality of sectors in oblique images captured from said fourth perspective.

32. The method of claim 31, wherein said fourth path is also spaced apart from said third path.